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10/725,802	12/02/2003	Michael Joseph Washburn	139682UL (15276US01)	3317

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EXAMINER

BODDIE, WILLIAM

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

08/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/725,802

Applicant(s)

WASHBURN, MICHAEL JOSEPH

Examiner

WILLIAM L. BODDIE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

32DETAILED ACTION

1. In an amendment dated, June 30th, 2008 the Applicant traversed the rejections of claim 1-22. Currently claims 1-22 are pending.

Response to Arguments

2. Applicant's arguments filed June 30th, 2008 have been fully considered but they are not persuasive.

3. On pages 2 and 4-5 of the Remarks, the Applicant argues that McCabe does not control functionality of the imaging system. Applicant argues that McCabe merely discloses adjusting the input P and that this input is not controlling functionality.

The Examiner must respectfully disagree. Adjustment of the variable P is integral to the functionality of the device. The variable P determines the sensitivity and particulars of the displayed Doppler image. Furthermore it should be noted that all that is required by the claim language is that the command adjust a setting or function of the medical imaging system. It seems well within the broadest reasonable interpretation of the limitation to include adjusting the setting of McCabe's P variable. As such the rejection is seen as sufficient and thus maintained.

4. On pages 2-3 and 5 of the Remarks, the Applicant argues that Goto does not disclose translating rotational movement of the trackball to a command for execution. The Applicant argues that Goto requires a depression of the trackball to execute the command.

It appears that the Applicant is using a very narrow definition of the limitation terms. The Applicant is directed to dependent claim 3 which requires a depression of

the trackball before the command is transmitted. Goto requires just such a depression. Review of the previously cited sections of Goto will show that rotational movement results in changes on the output display of Goto. The depression of the trackball is merely to confirm and transmit the command. Specifically the Applicant is directed to figure 13 which discloses very clearly that rotation of the trackball is translated to a command for execution. Therefore as shown above the rejection is seen as sufficient and is thus maintained.

5. On pages 4-6 of the Remarks, the Applicant argues that Goto does not disclose a transmitter, but rather an interface.

The Examiner must respectfully disagree. All that is required of the transmitter in the claim language is that the transmitter transmit a command to the imaging system. Goto's interface circuit, 356 in figure 23, certainly encompasses such a limitation. The interface takes the command output by the trackball in figure 23 and transmits it to the imaging system, 357. Thus Goto's interface circuit, 356, certainly fits within the broadest reasonable interpretation of a transmitter for transmitting a command to an imaging system. As such the rejection is seen as sufficient and thus maintained.

6. On page 5 of the Remarks, the Applicant argues that Goto does not disclose a remote mouse. It should first be noted that it was never the Examiner's position that Goto taught a remote mouse. Furthermore the limitation "remote mouse" occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the

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process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

7. On pages 6-9 of the Remark, the Applicant traverses the rejection of the dependent claims on the same grounds discussed above. As shown above the rejections are seen as sufficient and are thus maintained.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 3, 5-8, 11, 13-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCabe et al. (US 5,868,676) in view of Goto (US 5,832,323).

With respect to claim 1, McCabe discloses, a method for remotely operating a medical diagnostic imaging system (fig. 1), said method comprising;

moving a trackball in a trackball device (61 in fig. 1);

translating movement of said trackball to a command for execution at said

medical diagnostic imaging system (col. 7, lines 36-67);

transmitting said command based on movement of said trackball to said display imaging system from said handheld trackball device (col. 8, lines 1-10; for example);
and

executing said command at said display imaging system, wherein said command comprises adjusting a setting or function of said display imaging system based on said command (command adjusts the "P value" to fine tune the maximum velocity curve; col. 7, lines 43-51).

McCabe does not expressly disclose that the movement is rotational or that device is handheld.

Goto discloses a method for operating an imaging system (fig. 4), said method comprising:

moving a trackball in a handheld trackball device (figs. 5-7);

translating rotational movement of said trackball to a command for execution at said imaging system (col. 20, lines 28-33);

transmitting said command based on rotational movement of said trackball to said imaging system from said handheld trackball device (col. 20, lines 28-33; col. 22, lines 30-32; for example).

Goto and McCabe are analogous art because they are from the same field of endeavor namely trackball input device controls for imaging devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to use rotational motion of McCabe's remote trackball to command the imaging system; as taught by Goto.

The motivation for doing so would have been to improve the ergonomics and operability of the trackball (Goto; col. 6, lines 38-51; for example).

With respect to claim 3, McCabe and Goto disclose, the method of claim 1 (see above).

McCabe does not expressly disclose depressing said trackball.

Goto further discloses, transmitting said command based on depressing said trackball (col. 21, lines 30-35).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the switch of Goto under the trackball of McCabe for the well-known benefit of ergonomic inputs and ease of use for the user.

With respect to claim 5, McCabe and Goto disclose, the method of claim 1 (see above).

McCabe further discloses, controlling said imaging system using a remote keypad (63 and 65 in fig. 1).

With respect to claim 6, McCabe and Goto disclose, the method of claim 1 (see above).

McCabe does not expressly disclose pressing a button on said handheld trackball device to trigger an imaging system command.

Goto further discloses, pressing a button (112 in fig. 7) on a handheld trackball device to trigger an imaging system command (col. 21, lines 30-35).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the switch of Goto under the trackball of McCabe for the well-known benefit of ergonomic inputs and ease of use for the user.

With respect to claim 7, McCabe discloses, a trackball device for controlling a medical diagnostic imaging system (fig. 1) said device comprising:

a trackball for controlling said display imaging system based on motion of said trackball (col. 7, lines 36-67);

a transmitter for transmitting a command to said display imaging system based on motion of said trackball (col. 8, lines 1-10; for example)), said command generated through translation of said motion of said trackball to a command for execution at said display imaging system (command adjusts the "P value" to fine tune the maximum velocity curve; col. 7, lines 43-51).

McCabe does not expressly disclose a handheld housing nor that the motion is rotational.

Goto discloses a method for operating an imaging system (fig. 4), said method comprising:

a trackball in a handheld trackball device (figs. 5, 7) for controlling imaging said imaging system based on rotational movement of said trackball (col. 20, lines 28-33);

a transmitter (356 in fig. 23; for example) transmitting said command based on rotational movement of said trackball to said imaging system from said handheld trackball device (col. 20, lines 28-33; col. 22, lines 30-32; for example); and

a housing for holding said trackball (301 in fig. 24; for example) and said transmitter (356 in fig. 23; for example).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include a housing and use rotational motion of McCabe's remote trackball to command the imaging system; as taught by Goto.

The motivation for doing so would have been to improve the ergonomics and operability of the trackball (Goto; col. 6, lines 38-51; for example).

With respect to claim 8, McCabe and Goto disclose, the device of claim 7 (see above).

McCabe does not expressly disclose pressing a button on said handheld trackball device to trigger an imaging system command.

Goto further discloses, pressing a button (112 in fig. 7) on a handheld trackball device to trigger an imaging system command (col. 21, lines 30-35).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the switch of Goto under the trackball of McCabe for the well-known benefit of ergonomic inputs and ease of use for the user.

With respect to claim 11, McCabe and Goto disclose, the method of claim 7 (see above).

McCabe further discloses, controlling said imaging system using a remote keypad (63 and 65 in fig. 1).

With respect to claim 13, McCabe discloses, a remote mousing device for operating a medical diagnostic imaging system (fig. 1), said device comprising:

a moveable portion (61 in fig. 1) for operating said display imaging system based on motion of said moveable portion (col. 7, lines 36-67); and

a transmitter for transmitting a command to said display imaging system based on said moveable portion (col. 8, lines 1-10; for example), said command generated through translation of motion of said moveable portion to a command for execution at said display imaging system(command adjusts the "P value" to fine tune the maximum velocity curve; col. 7, lines 43-51).

McCabe does not expressly disclose that the motion is rotational.

Goto discloses a method for operating an imaging system (fig. 4), said method comprising:

a trackball in a handheld trackball device (fig. 7) for controlling imaging said imaging system based on rotational movement of said trackball (col. 20, lines 28-33);

a transmitter (356 in fig. 23; for example) transmitting said command based on rotational movement of said trackball to said imaging system from said handheld trackball device (col. 20, lines 28-33; col. 22, lines 30-32; for example).

At the time of the invention it would have been obvious to one of ordinary skill in the art to use the rotational motion of McCabe's remote trackball to command the imaging system, as taught by Goto.

The motivation for doing so would have been to improve the ergonomics and operability of the trackball (Goto; col. 6, lines 38-51; for example).

With respect to claim 14, McCabe and Goto disclose, the mousing device of claim 13 (see above).

McCabe further discloses, wherein said moveable portion comprises a trackball (61 in fig. 1).

With respect to claim 15, McCabe and Goto disclose, the mousing device of claim 13 (see above).

McCabe further discloses, an additional input receptor (63 in fig. 1; for example).

With respect to claim 16, McCabe and Goto disclose, the mousing device of claim 15 (see above).

McCabe further discloses, wherein said additional input receptor is a button (63 in fig 1).

With respect to claim 17, McCabe and Goto disclose, the mousing device of claim 13 (see above).

McCabe further discloses, controlling said imaging system using a remote keypad (63 and 65 in fig. 1).

With respect to claim 19, McCabe and Goto disclose, the mousing device of claim 13 (see above).

McCabe, when combined with Goto, discloses, wherein said mousing device comprises a handheld mousing device (Goto; figs. 5, 7).

10. Claims 2, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCabe et al. (US 5,868,676) in view of Goto (US 5,832,323) and further in view of Gaughan et al. (US 5,589,893).

With respect to claim 2, McCabe and Goto disclose, the method of claim 1 (see above).

Neither McCabe nor Goto expressly disclose, wherein said transmitting step further comprises wireless transmission of said command to said imaging system.

Gaughan discloses wireless transmission (col. 2, lines 10-13) of a command to an imaging system (fig. 1).

McCabe, Goto and Gaughan are analogous art because they are all from the same field of endeavor namely trackball input device controls for imaging devices.

At the time of the invention it would have been obvious to make the transmission of the commands of McCabe and Goto's device wireless as taught by Gaughan.

The motivation for doing so would have been the well-known benefit of removing location limiting wires and allowing the user more freedom in operation.

With respect to claim 12, McCabe and Goto disclose, the device of claim 7 (see above).

Neither McCabe nor Goto expressly disclose, a wireless handheld trackball device.

Gaughan, discloses a wireless handheld trackball device (col. 2, lines 10-13 and fig. 2).

At the time of the invention it would have been obvious to make the transmission of the commands of McCabe and Goto's device wireless as taught by Gaughan.

The motivation for doing so would have been the well-known benefit of removing location limiting wires and allowing the user more freedom in operation.

With respect to claim 18, McCabe and Goto disclose, the mousing device of claim 13 (see above).

Neither McCabe nor Goto expressly disclose, a wireless handheld mousing device.

Gaughan, discloses a wireless handheld mousing device (col. 2, lines 10-13 and fig. 2).

At the time of the invention it would have been obvious to make the transmission of the commands of McCabe and Goto's device wireless as taught by Gaughan.

The motivation for doing so would have been the well-known benefit of removing location limiting wires and allowing the user more freedom in operation.

11. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCabe et al. (US 5,868,676) in view of Goto (US 5,832,323) and further in view of Chang (US 5,298,919).

With respect to claims 4 and 10, McCabe and Goto disclose, the method of claims 1 and 7 (see above).

Neither McCabe nor Goto expressly disclose, wherein said trackball comprises a wheel on a mousing device.

Chang, discloses mounting a wheel (18 in fig. 1) on a handheld device (10 in fig. 1) for inputting additional movement to a display system.

Chang, McCabe and Goto are analogous art because they are all from the same field of endeavor namely cursor control of imaging devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the wheel of Chang on the trackball device of McCabe and Goto for the clear benefit of allowing additional movement to be inputted into the system.

12. Claims 9 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCabe et al. (US 5,868,676) in view of Goto (US 5,832,323) and further in view of Funda et al. (US 5,417,210).

With respect to claim 9, McCabe and Goto disclose, the device of claim 7 (see above).

Neither McCabe nor Goto expressly disclose the use of voice commands to control said imaging system.

Funda discloses, wherein said trackball device works with voice commands to control said imaging system (267 in fig. 1).

Funda, McCabe and Goto are analogous art because they are all from the same field of endeavor namely trackball input device controls for imaging devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the voice command control taught by Funda in the device of McCabe and Goto.

The motivation for doing so would have been so that communications with the system do not interfere with instrument manipulation (Funda; col. 4, lines 13-17).

With respect to claims 21-22, McCabe and Goto disclose, the mousing device of claim 13 (see above).

Neither McCabe nor Goto expressly disclose that the mousing device is integrated with an instrument.

Funda discloses, wherein a mousing device is integrated with an imaging instrument (col. 6, lines 32-59; col. 9, lines 65-68).

At the time of the invention it would have been obvious to one of ordinary skill in the art to integrate the mousing device of McCabe and Goto as taught by Funda for the benefit of easily manipulation of the device without removing hands from the instrument (Funda; col. 6, lines 53-59).

13. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCabe et al. (US 5,868,676) in view of Goto (US 5,832,323) and further in view of Holmes (US 6,222,526).

With respect to claim 20, McCabe and Goto disclose, the mousing device of claim 13 (see above).

Neither McCabe nor Goto expressly disclose a fastener.

Holmes discloses, a mousing device (12 in fig. 7) comprising a fastener (54 in fig. 7) for affixing said mousing device to an operator (clear from fig. 7).

Holmes, McCabe and Goto are analogous art because they are all from the same field of endeavor namely cursor control of imaging devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the fastener of Holmes on the trackball device of McCabe and Goto for the clear benefit of fastening the input device to the operator.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM L. BODDIE whose telephone number is (571)272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. L. B./

Examiner, Art Unit 2629

8/12/08

/Bipin Shalwala/

Supervisory Patent Examiner, Art Unit 2629